MONTHLY WEATHER REVIEW,

DECEMBER, 1874.

WAR DEPARTMENT,

Office of the Chief Signal Officen,

TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE. INTRODUCTION.

The meteorological data collected in this office during the month of December has been carefully examined, and a general summary of the several elements is given in the accompanying charts and tables. The stations of observation are so distributed as to give the meteorological condition of that portion of North America lying between the twenty-fifth and fiftieth degrees of latitude, and extending from the Atlantic to the Pacific. The following are the sources from which reports have been received: Canadian Meteorological Service 12. United States Army Surgeons 36. United States Naval Hospitals 2. United States Army Signal Service 87. Regular Volunteer Observers 264.

In addition to the above, marine reports have been received, which have proved of special value in the study of storms which have passed to the eastward off the Atlantic coast beyond the regions of permanent stations. By means of these reports the most severe storm of the month—that occuring on the 19th and 20th—is traced to the fifty-fifth meridian west of Greenwich, fifteen hundred miles east of the middle Atlantic coast. The increasing severity of this storm, and the desire to trace it through its entire course, led to a telegram being sent from this office to the Director of the Meteorological Office, London, on the 23d instant, to the effect that the storm had left our coast on the fortieth parallel of latitude, moving to the eastward. A detailed description of this storm will be found in the text.

The most noticeable features of the weather of December are—

First: The mean temperature, which has been above the mean of previous years, and differs but slightly from that of 1873.

Second: A deficiency in precipitation in all the districts east of the Mississippi river and in the Northwest.

Third: An excessive precipitation in the Southwest.

Fourth: The unusual low temperature and excessive precipitation in New Mexico.

BAROMETRIC PRESSURE.

A comparison of the mean isobarometric lines on Chart No. II, with those of the preceding month, will show that the area of mean high barometer has increased both in extent and intensity. This area now extends over the southern portion of the United